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HEALTH RESOURCES

AND NEEDS

in South Central Montana

by
Sandra Martenson



Resources Development Internship Program
Western Interstate Commission for Higher Education



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in this report
are those of the author.
They do not necessarily reflect
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HEALTH RESOURCES AND NEEDS
IN
SOUTH CENTRAL MONTANA

Sandra Martenson
WICHE Intern

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September 5, 1972

TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	1
Description of Area.....	2
Existing Health Manpower.....	14
Health Manpower Training Resources.....	26
Suggestions for Local Interdevelopment of Health Training Resources.....	29
Health Service Needs and Attitudes.....	32
Recommendations.....	37
Appendix	
Appendix A - Bibliography	
Appendix B - Acknowledgements	



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INTRODUCTION AND OBJECTIVES

"...the provision of highly skilled health manpower is a special responsibility of higher education. The adequacy of health care facilities, however, is the responsibility, not of universities and colleges, but of federal, state, and local health authorities. Planning is partly a responsibility of higher education, particularly the planning for health personnel, but mostly of public agencies."¹

This report is the result of a project undertaken to aid South Central Montanans in better understanding the health needs of their area.

The objectives of the project are as follows:

1. Determine the existing health manpower in South Central Montana.
2. Identify existing health manpower training resources in the region and give suggestions for specific local inter-development of these resources.
3. Determine health service needs in South Central Montana.

The author hopes that the suggestions presented in this report will aid the local health authorities, agencies and colleges mentioned in the above quote in meeting their responsibilities of improving their current health care situation.

¹The Carnegie Commission on Higher Education, Higher Education and the Nation's Health, McGraw-Hill Book Company, Hightstown, New Jersey, 1970, p. 1.

DESCRIPTION OF AREA*

South Central Montana is the State Comprehensive Health Planning Area 5, composed of nine counties; Big Horn, Carbon, Golden Valley, Musselshell, Stillwater, Sweet Grass, Treasure, Wheatland, and Yellowstone. Yellowstone County contains the only urban center; Billings. The total population of the area is 120,379, and 87,367 of those live in Yellowstone County. Billings's population is 61,581 which is 51.06 percent of the total area population.

A separate category has been made for the area excluding Yellowstone County on all tables in order to give a better profile of the South Central Montana counties.

TABLE 1 - Population

Although the Area 5 population change from 1950 to 1970 exceeds that of the state for the same period, the area excluding Yellowstone County shows a loss of 18.4 percent. Only Big Horn, Stillwater and Yellowstone Counties had any gain between 1950 and 1960, and only two counties, Big Horn and Yellowstone, gained in population from 1969 to 1970.

TABLE 2 - Age Characteristics

The reason for excluding Big Horn as well as Yellowstone County from the area computations in TABLE 2 is to avoid the influence of the Crow Indian Reservation present in Big Horn County. The only category in which the Area 5 figures do not closely compare to those of the state is median age; the Area median age being 5.4 years above that of the state. However, the area excluding Yellowstone and Big Horn shows a smaller percentage of population under 18 years and between 18 and 29 years and a greater percentage in the 30-to-64 and 65-years-and-over categories. Only Big Horn, Treasure and Yellowstone Counties' population percentages of 65 years and over do not exceed their percentage of 18 to 29 years.

TABLE 3 - Rural Population and Economy

All counties, excluding Yellowstone, are almost completely rural; Big Horn County has a population that is 72.8 percent rural while Yellowstone is only 13.3 percent rural. Seven counties are agricultural in their economic base. Yellowstone's

* These descriptions are based upon census data whose limitations are indicated in the original sources. Please see the source references included with each table.

economy is based on trade, service and manufacturing, and Musselshell relies upon exploitation of coal, gas and oil reserves for its economy with trade and agriculture activities running a close second and third.¹

TABLE 4 - Employment and Income:

One county, Musselshell, exceeds the state unemployment percentage; all other counties have low levels of unemployment. The non-worker to worker ratio is lower than or near that of the state in all but Big Horn and Stillwater Counties.

The median family income of the rural communities (exclusion of Yellowstone) varies only \$937 between highest (Wheatland) and lowest (Sweet Grass). However, the area excluding Yellowstone has a median family income \$1,544 below that of Montana. The percent of families earning \$15,000 or more is also below the state percentage in most counties. Furthermore, the percent of families below the poverty level exceeds Montana's percentage in all but Yellowstone and Golden Valley Counties.

TABLE 5 - Vital Statistics:

The stillbirth rate of the area excluding Yellowstone is nearly twice that of Yellowstone and of the state. The infant death rate is also significantly higher, whereas the live birth rate is lower.

TABLE 6 - County Expenditures for Health:

No county in South Central Montana nears the average county expenditure for health and hospital; the average for Area 5 excluding Yellowstone being more than four times less than the average Montana county expenditure.

SUMMARY - Yellowstone County:

1. The greatest concentration of the Area 5 population is in Yellowstone County.
2. Yellowstone County is growing at a greater rate than Montana.
3. The distribution of population by age in Yellowstone County compares to that of the state.
4. Yellowstone County is a trade, service and manufacturing center with a small percentage of rural farm and non-farm population.

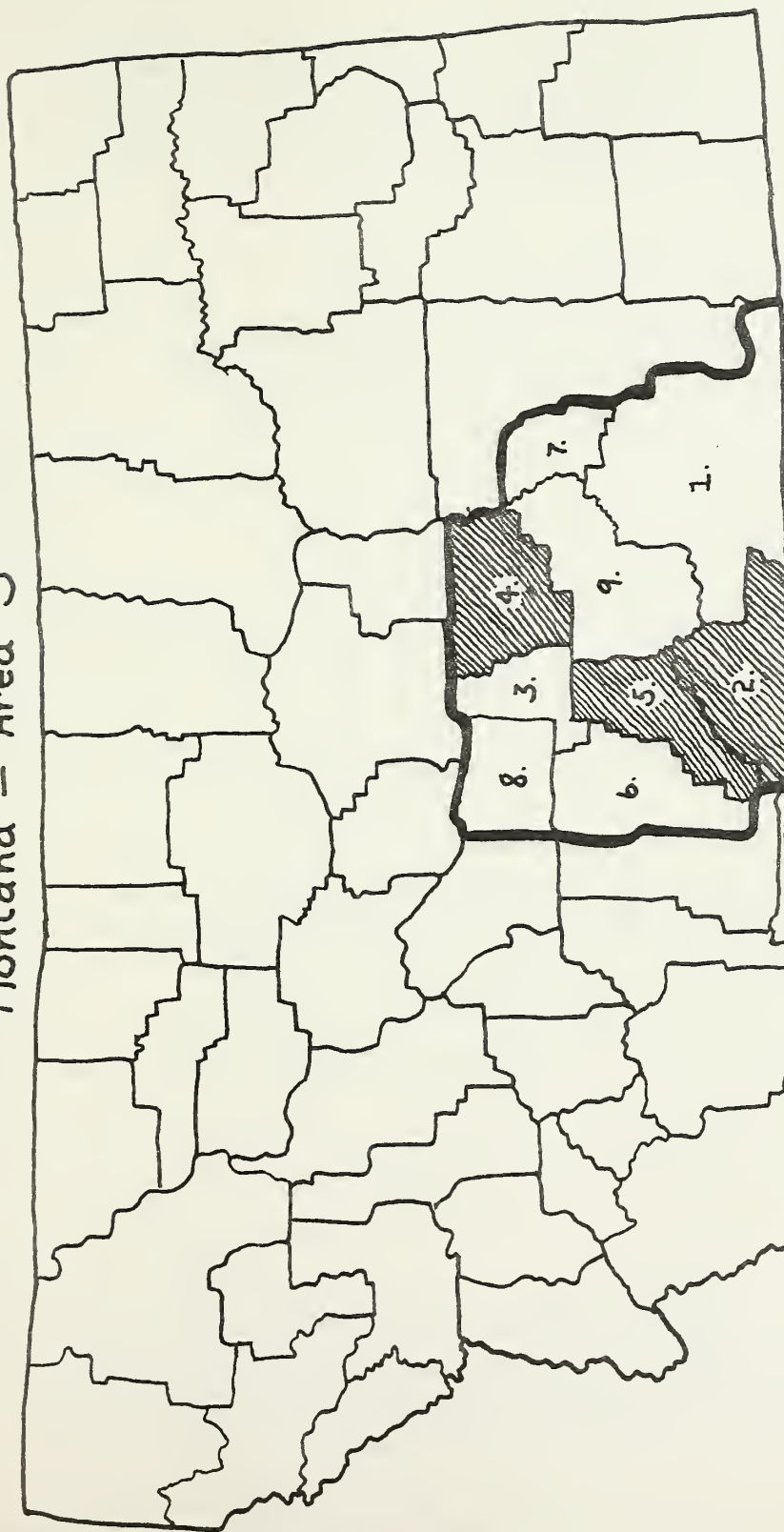
¹South Central Regional Health Planning Council, Inc., Planning Grant Proposal for a Health Education System in South Central Montana, Billings, Montana, 1972, p. 5.

5. Yellowstone County has a lower unemployment rate than Montana.
6. Yellowstone County is more economically prosperous than the state.
7. Child birth and death rates compare to those of Montana.
8. County expenditures for health and hospitals has been less than that spent by the average Montana county.
9. Yellowstone County has all characteristics representative of a thriving metropolitan area.

SUMMARY - Area Excluding Yellowstone:

1. Only 27.5 percent of the Area 5 population is in the eight counties surrounding Yellowstone.
2. All counties show little potential for growth.
3. Distribution of population by age indicates a large percentage of elderly and a small population between the ages of 18 and 29.
4. Most counties are rural and agricultural.
5. All counties have low unemployment rates.
6. Compared to state averages, all counties are below average economically.
7. In most counties stillbirth and infant death rates are above the Montana average and live birth rates are below.
8. The average health and hospital expenditures of these counties is significantly below that of the average Montana county.
9. The South Central Area of Montana excluding Yellowstone County has most of the characteristics of small rural communities.

Montana — Area 5



Area of maximum field research completed by author.

1. Big Horn County
2. Carbon County
3. Golden Valley County
4. Musselshell County
5. Stillwater County
6. Sweet Grass County
7. Treasure County
8. Wheatland County
9. Yellowstone County

TABLE 1

TOTAL POPULATION 1950, 1960, 1970, AREA 5; PERCENT CHANGE
1950 to 1960, 1960 to 1970, 1950 to 1970.

COUNTY	POPULATION 1950	POPULATION 1960	1970	1950 to 1960 % CHANGE	1960 to 1970 % CHANGE	1950 to 1970 % CHANGE
BIG HORN	9,824	10,007	10,057	1.9	0.5	2.4
CARBON	10,241	8,317	7,080	-18.8	-14.9	-30.9
GOLDEN VALLEY	1,337	1,203	931	-10.0	-22.6	-30.4
MUSSELSHELL	5,408	4,888	3,734	- 9.6	-23.6	-31.0
STILLWATER	5,416	5,526	4,632	2.0	-16.2	-14.5
SWEET GRASS	3,621	3,290	2,980	- 9.1	- 9.4	-17.7
TREASURE	1,402	1,345	1,069	- 4.1	-20.5	-23.8
WHEATLAND	3,187	3,026	2,529	- 5.0	-16.4	-20.7
YELLOWSTONE	55,875	79,016	87,367	41.4	10.6	56.4
AREA 5	96,311	116,618	120,379	21.0	3.2	25.0
AREA EXCLUDING YELLOWSTONE	40,436	37,602	33,012	- 7.0	-12.2	-18.4
MONTANA	591,024	674,767	694,409	14.2	2.9	17.5

*SOURCES:

Montana State University, The Montana Almanac Statistical Supplement, Missoula, Montana, 1962-63.
 Montana State University, The Montana Almanac, Missoula, Montana, 1959-60.
 U.S. Department of Commerce, Bureau of the Census, General Population Characteristics Montana,
 August, 1971.

TABLE 2

POPULATION DISTRIBUTION BY AGE, IN PERCENT, AND MEDIAN AGE FOR AREA 5, 1970.

COUNTY	UNDER 18 YRS.	18 to 29 YRS.	30 to 64 YRS.	65 YRS. and OVER	MEDIAN AGE
BIG HORN	42.1	16.6	34.3	7.0	23.4
CARBON	31.0	10.2	41.4	17.4	33.2
GOLDEN VALLEY	31.3	12.8	40.3	15.6	36.8
MUSSELSHELL	32.3	11.8	39.6	16.3	37.3
STILLWATER	33.0	11.9	40.3	14.8	35.5
SWEET GRASS	31.2	12.7	39.6	16.5	37.1
TREASURE	38.0	13.0	38.4	10.6	29.2
WHEATLAND	34.0	12.5	40.1	13.4	33.6
YELLOWSTONE	36.3	18.5	37.1	8.1	26.2
AREA 5	36.0	17.0	37.5	9.5	32.5
AREA EXCLUDING YELLOWSTONE & BIG HORN	32.3	11.6	40.4	15.7	34.7
MONTANA	36.5	17.1	36.5	9.9	27.1

SOURCE: U.S. Department of Commerce, Bureau of the Census, General Population Characteristics
Montana, August, 1971.

TABLE 3

PERCENT OF POPULATION RURAL NON-FARM AND RURAL FARM; FOR AREA 5, 1970.

COUNTY	% RURAL NON-FARM	% RURAL FARM
BIG HORN	45.2	27.6
CARBON	68.1	31.9
GOLDEN VALLEY	48.0	52.0
MUSSELSHELL	71.1	28.9
STILLWATER	67.4	32.6
SWEET GRASS	66.2	33.8
TREASURE	50.2	49.8
WHEATLAND	76.6	23.4
YELLOWSTONE	8.6	4.7
AREA MEAN	55.7	31.6
AREA EXCLUDING YELLOWSTONE	61.6	35.0
MONTANA	33.5	12.8

Source: U.S. Department of Commerce, Bureau of the Census, General
Social and Economic Characteristics, Montana, August, 1971.

TABLE 4

PERCENT OF CIVILIAN LABOR FORCE UNEMPLOYED, NON-WORKER TO WORKER RATIO, MEDIAN FAMILY INCOME, PERCENT OF FAMILIES LESS THAN POVERTY LEVEL AND 15,000 OR MORE (DOLLARS); FOR AREA 5, 1970.

COUNTY	CIVILIAN LABOR FORCE % UNEMPLOYED	NON-WORKER TO WORKER RATIO	MEDIAN FAMILY INCOME	% FAMILIES LESS THAN POVERTY LEVEL	% FAMILIES \$15,000 OR MORE
BIG HORN	4.6	2.00	\$7310	21.4	9.6
CARBON	5.2	1.75	6578	14.3	9.7
GOLDEN VALLEY	4.7	0.97	7389	4.0	17.2
MUSSELSHELL	7.4	1.57	6763	13.6	4.6
STILLWATER	5.4	1.84	6752	12.5	10.1
SWEET GRASS	2.1	1.25	6530	16.5	9.8
TREASURE	1.3	1.42	6955	17.2	13.6
WHEATLAND	1.5	1.26	7467	12.6	6.9
YELLOWSTONE	5.8	1.45	8966	9.4	16.0
AREA MEAN	4.2	1.50	7190	13.5	10.8
AREA EXCLUDING YELLOWSTONE	4.0	1.50	6968	14.0	10.2
MONTANA	6.2	1.56	8512	10.4	13.7

Source: U.S. Department of Commerce, Bureau of the Census, General Social and Economic Characteristics, Montana, August, 1971.

TABLE 5

NUMBER AND RATE OF STILLBIRTHS, INFANT DEATHS, AND LIVE BIRTHS; 1966;
AND FERTILITY RATES; 1970; FOR AREA 5.

COUNTY	STILLBIRTHS		INFANT DEATHS		LIVE BIRTHS		FERTILITY RATE***
	Number	Rate*	Number	Rate*	Number	Rate**	
BIG HORN	4	16.6	12	49.8	241	23.2	3,432
CARBON	2	22.0	2	22.0	91	12.3	3,612
GOLDEN VALLEY	-	-	-	-	11	9.2	3,087
MUSSELSHELL	2	36.4	1	18.2	55	11.5	3,354
STILLWATER	-	-	-	-	60	12.2	3,621
SWEET GRASS	-	-	1	22.7	44	15.2	2,933
TREASURE	-	-	2	83.3	24	17.1	2,917
WHEATLAND	3	63.8	-	-	47	15.7	3,862
YELLOWSTONE	15	10.7	30	21.4	1406	17.7	3,182
AREA 5	26	13.1	48	24.3	1979	17.2	3,333
AREA EXCLUDING YELLOWSTONE	11	19.2	18	31.4	573	16.9	3,352
MONTANA	140	11.1	286	22.7	12,623	18.0	3,419

*Rate is based on number of stillbirths or infant deaths per 1,000 live births.

**Rate is based on number of live births per 1,000 population.

***Cumulative rate based on women 35 to 44 years, children ever born per 1,000 women of all marital classes. (Area 5 and Area Excluding Yellowstone rates are means.)

Sources: U.S. Department of Commerce, Bureau of the Census, General Social and Economic Characteristics, Montana, August, 1971.

Mountain States Regional Medical Program, Health Profile, Montana, Western Interstate Commission for Higher Education, Boulder, Colorado, July, 1969.

TABLE 6

TOTAL COUNTY EXPENDITURES, AMOUNT (IN \$1,000) AND PERCENT
SPENT FOR HEALTH AND HOSPITALS; FOR AREA 5, 1962.

COUNTY	(in \$1,000)	HEALTH & HOSPITAL EXPENDITURES	
	TOTAL EXPENDITURES	Amount(in \$1,000)	Percent
BIG HORN	1,744	44	2.5
CARBON	1,789	1	0.1
GOLDEN VALLEY	307	1	0.3
MUSSELSHELL	851	-	-
STILLWATER	1,027	4	0.4
SWEET GRASS	650	3	0.5
TREASURE	309	1	0.3
WHEATLAND	614	5	0.8
YELLOWSTONE	16,288	169	1.0
AREA 5*	23,579	228	1.9
AREA EXCLUDING YELLOWSTONE*	7,291	59	0.8
MONTANA*	128,831	4,532	3.5

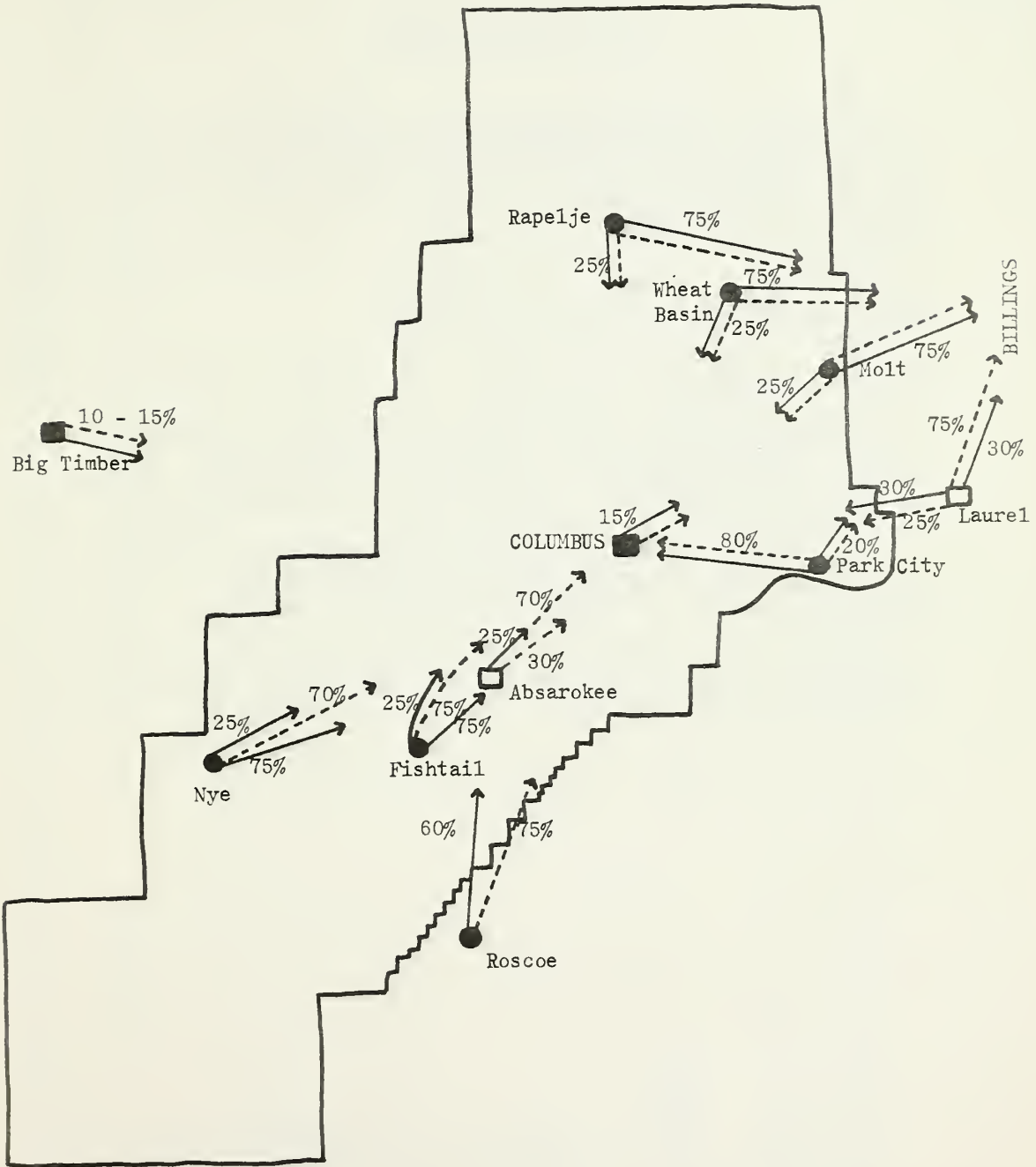
*Not Area and Montana expenditures but total of county expenditures.

Source: Mountain States Regional Medical Program, Health Profile, Montana,
Western Interstate Commission For Higher Education, Boulder,
Colorado, July, 1969.

EXPLANATION OF CHART 2

CHART 2 shows the direction and magnitude of the usage of doctor and hospital care in Stillwater County. The proper procedure for collecting the following data is through questionnaires sent to a sample of the population. However, severe time limitation prevented the use of such a method. The information for CHART 2 was obtained from interviews with knowledgeable and qualified persons in the area. The data was compiled and checked by several more people. After their criticisms and corrections were taken into consideration, a final draft was made and presented to more persons for approval. The time allotted for completion of this entire survey prevented collection of similar data for all nine counties in South Central Montana.

Stillwater County



- - - - Hospital care

----- Doctor care - general

□ Doctor(s)

■ Hospital + Doctor(s)

* All specialty care goes to Billings

EXISTING HEALTH MANPOWER IN SOUTH CENTRAL MONTANA

Due the short length of time allotted for the survey, the following lists of health manpower are not exhaustive as not all rest homes and doctor's clinics were contacted. It was the author's decision that these facilities, i.e. rest homes and doctor's clinics, would not significantly effect the number of health personnel in these counties.

There will be no tables for Golden Valley and Treasure Counties as they have no health facilities or personnel.

TABLE 7 - Doctor to Population Ratios:

Yellowstone County is near the national average of 150 doctors to every 100,000 population or 1 doctor to every 667 persons.¹ The Area 5 ratio for physicians is above that of Montana; however, the ratio for the area excluding Yellowstone is far below that of the state and nation.

The ratio of dentists to population is lower than the state in all counties except Yellowstone, and the ratio for the area excluding Yellowstone is about one-third less than the Montana ratio.

Yellowstone's optometrist-to-population ratio is smaller than all counties, the state, and the area excluding Yellowstone. The state ratio is also smaller than the ratio for the area excluding Yellowstone.

¹Roy, William R., M.D., Health Maintenance Organization Act of 1972, The Science & Health Communications Group, Washington, D.C., 1972, p. 7.

TABLE 7

NUMBER OF DOCTORS, DENTISTS AND OPTOMETRISTS; RATIO OF DOCTORS TO POPULATION,
RATIO OF DENTISTS TO POPULATION AND RATIO OF OPTOMETRISTS TO POPULATION; FOR AREA 5, 1970.

COUNTY	# of DOCTORS	RATIO	# of DENTISTS	RATIO	# of OPTOMETRISTS	RATIO
BIG HORN	7	1/1437	2	1/5029	1½*	1/6705
CARBON	4	1/1770	3	1/2360	1	1/7080
GOLDEN VALLEY	0	inf.	0	inf.	0	inf.
MUSSELSHELL	2	1/1245	1½*	1/2489	1	1/3734
STILLWATER	3	1/1544	2	1/2316	0	inf.
SWEET GRASS	2	1/1490	1½*	1/1987	1½*	1/5960
TREASURE	0	inf.	0	inf.	0	inf.
WHEATLAND	2	1/1265	1	1/2529	2	1/1265
YELLOWSTONE	126	1/ 693	53	1/1648	12	1/7281
AREA 5	146	1/ 825	64	1/1911	18	1/6688
AREA EXCLUDING YELLOWSTONE	20	1/1651	11	1/3301	6	1/5502
MONTANA	721	1/ 963	318	1/2184	100	1/6944

*½ - indicates health personnel is semi-retired or practices only part-time in that community.

Sources:

Mountain States Regional Medical Program, Survey, Boise, Idaho, Summer, 1972.
Montana Department of Planning and Economic Development, Montana Data Book, Helena, Montana, 1970.
Montana State Department of Health, County Profiles, Helena, Montana, 1972.

TABLE 8-1

EXISTING HEALTH MANPOWER IN BIG HORN COUNTY, 1972.

Crow Agency (Indian Health Service)

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	5
DENTISTS	1
OPTOMETRISTS	1
PHARMACY	
Pharmacists	1½*
NURSING AND RELATED SERVICES	
Director of Nursing	1
Registered Nurses	9
Licensed Practical Nurses	7
Nurse Aides	5
LAB/X RAY PERSONNEL	2
KITCHEN PERSONNEL	
Consulting Dietitian	1
Food Service Personnel	5
OFFICE PERSONNEL	N.A.**
ADMINISTRATION	
Hospital	1
PSYCHO-SOCIAL HEALTH SERVICES	
Social Worker	1
Mental Health Nurse	1
EMERGENCY HEALTH SERVICES	
Ambulance	1
Attendants	4
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	1
PUBLIC HEALTH	
Nurse	1

*½ - Indicates that health personnel work only part-time in that capacity.

**N.A. - Not Available.

TABLE 8-2

EXISTING HEALTH MANPOWER IN BIG HORN COUNTY, 1972.

Hardin

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	2
DENTISTS	1
OPTOMETRISTS	$\frac{1}{2}$ *
PHARMACY	
Pharmacists	3
Consulting Pharmacist	1
NURSING AND RELATED SERVICES	
Director of Nursing	1
Registered Nurses	7
Licensed Practical Nurses	$1\frac{1}{2}$ *
Nurse Aides	13
LAB/X RAY PERSONNEL	2
KITCHEN PERSONNEL	
Consulting Dietitian	1
Food Service Personnel	3
OFFICE PERSONNEL	
Medical Record Librarian	1
Accredited Record Technician	1
Insurance Clerk	1
Bookkeeper	1
Other	3
ADMINISTRATION	
Hospital	1
Rest Home	1
PSYCHO-SOCIAL HEALTH SERVICES	
Psychologist II	1
Social Worker II	1
EMERGENCY HEALTH SERVICES	
Ambulance	1
Attendant	1
Driver	$\frac{1}{2}$ *
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	1
PUBLIC HEALTH	
Nurse	3

* $\frac{1}{2}$ - Indicates that health personnel work only part-time in that capacity or visit community only certain days of the week.

TABLE 9

EXISTING HEALTH MANPOWER IN CARBON COUNTY, 1972.

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	4
DENTISTS	2
OPTOMETRISTS	1
PHARMACY Pharmacists	2
PHYSICIAN SUPPORT PERSONNEL Nurse Anesthetist	$\frac{1}{2}$ *
NURSING AND RELATED SERVICES	
Director of Nursing	1
Registered Nurses	6
Licensed Practical Nurses	6
Nurse Aides	15
LAB/X RAY PERSONNEL	3
KITCHEN PERSONNEL	
Consulting Dietitian	1
Food Service Personnel	5
OFFICE PERSONNEL	10
ADMINISTRATION	
Hospital	1
Rest Home	1
PSYCHO-SOCIAL HEALTH SERVICES	
Psychologist II	1
EMERGENCY HEALTH SERVICES	
Ambulance	2
Attendants	Fire Department
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	$\frac{1}{2}$ *
PUBLIC HEALTH	
Nurse	0

* $\frac{1}{2}$ - Indicates that health personnel work only part-time in that capacity or visits community only certain days of the week.

TABLE 10

EXISTING HEALTH MANPOWER IN MUSSELSHELL COUNTY, 1972.

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	2
DENTISTS	1
OPTOMETRISTS	1
PHARMACY	
Pharmacists	2
NURSING AND RELATED SERVICES	
Director of Nursing	$\frac{1}{2}$ *
Registered Nurses	$8\frac{1}{2}$ *
Licensed Practical Nurses	$3\frac{1}{2}$ *
Nurse Aides	$9\frac{1}{2}$ *
LAB/X RAY PERSONNEL	
Registered Lab Technician	1
Other	1
KITCHEN PERSONNEL	
Consulting Dietitian	1
Food Service Personnel	$4\frac{1}{2}$ *
ADMINISTRATION	
Hospital	$\frac{1}{2}$ *
Rest Home	2
PSYCHO-SOCIAL HEALTH SERVICES	
Psychiatric Social Worker	1
EMERGENCY HEALTH SERVICES	
Ambulance	1
Attendant	0
Driver	1
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	$\frac{1}{2}$ *
PUBLIC HEALTH	
Nurse	0**

* $\frac{1}{2}$ - Indicates that health personnel work only part-time in that capacity.

**Plans are being made to obtain a Public Health Nurse.

TABLE 11

EXISTING HEALTH MANPOWER IN STILLWATER COUNTY, 1972.

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	3
DENTISTS	2
OPTOMETRISTS	0
PHARMACY	
Pharmacist	2
PHYSICIAN SUPPORT PERSONNEL	
Nurse Anesthetist	1
Surgical Nurse	$\frac{1}{2}$ *
NURSING AND RELATED SERVICES	
Director of Nursing	$\frac{1}{2}$ *
Registered Nurses	11 $\frac{1}{2}$ *
Licensed Practical Nurses	6 $\frac{1}{2}$ *
Nurse Aides	5
LAB/X RAY PERSONNEL	2
KITCHEN PERSONNEL	
Consulting Dietitian	1
Food Service Personnel	6
OFFICE PERSONNEL	7
ADMINISTRATION	
Hospital	1
Rest Home	1
PSYCHO-SOCIAL HEALTH SERVICES	
Guidance & Counseling Psychologist	1
EMERGENCY HEALTH SERVICES	
Ambulance	2
Attendants	0
Drivers	Volunteer
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	$\frac{1}{2}$ *
PUBLIC HEALTH	
Nurse	0
THERAPISTS	
Therapist Aide	$\frac{1}{2}$ *

* $\frac{1}{2}$ - Indicates that health personnel work only part-time in that capacity or visit community only certain days of the week.

TABLE 12

EXISTING HEALTH MANPOWER IN SWEET GRASS COUNTY, 1972.

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	2
DENTISTS	1 $\frac{1}{2}$ *
OPTOMETRISTS	$\frac{1}{2}$ *
PHARMACY	
Pharmacists	2
Consulting Pharmacist	1
NURSING AND RELATED SERVICES	
Director of Nursing	$\frac{1}{2}$ *
Registered Nurses	4 $\frac{1}{2}$ *
Licensed Practical Nurses	2
LAB/X RAY PERSONNEL	1
KITCHEN PERSONNEL	
Consulting Dietitian	0
Food Service Personnel	2
OFFICE PERSONNEL	
Medical Records Librarian	1
ADMINISTRATION	
Hospital	$\frac{1}{2}$ *
Nursing Home	1
PSYCHO-SOCIAL HEALTH SERVICES	
Guidance & Counseling Psychologist	$\frac{1}{2}$ *
EMERGENCY HEALTH SERVICES	
Ambulance	1
Attendant	0
Driver	1
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	$\frac{1}{2}$ *
PUBLIC HEALTH	
Nurse	0

* $\frac{1}{2}$ - Indicates health personnel work only part-time in that capacity, or visit community only certain days of the week or are semi-retired.

TABLE 13

EXISTING HEALTH MANPOWER IN WHEATLAND COUNTY, 1972.

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS	2
DENTISTS	1
OPTOMETRISTS	2
PHARMACY	
Pharmacists	1
NURSING AND RELATED SERVICES	
Director of Nursing	1
Registered Nurses	5
Licensed Practical Nurses	2
Nurse Aides	21
Ward Clerk	1
LAB/X RAY PERSONNEL	
Lab Technician	1
X Ray Technician	1
Lab/X Ray	1
KITCHEN PERSONNEL	
Consulting Dietitian	1
Food Service Personnel	8
OFFICE PERSONNEL	3
ADMINISTRATION	
Hospital	1
PSYCHO-SOCIAL HEALTH SERVICES	0
EMERGENCY HEALTH SERVICES	
Ambulance	1
Attendant	1
Drivers	Volunteer
ENVIRONMENTAL HEALTH SERVICES	
Sanitarian	0
PUBLIC HEALTH	
Nurse	0

TABLE 14

EXISTING HEALTH MANPOWER IN YELLOWSTONE COUNTY, 1972.¹

<u>Manpower Category</u>	<u>Number</u>
PHYSICIANS AND OSTEOPATHS	
Allergist	1
Anesthesiologist	7
Cardiovascular Disease Specialist	1
Dermatologist	3
General Practitioner	11
Gynecologist/Obstetrician	6
Internist	19
Neurological Surgeon	3
Ophthalmologist	10
Pathologist	2
Pediatrician	8
Plastic Surgeon	1
Podiatrist	3
Psychiatrist	3
Radiologist	8
Surgeon	15
Thoracic Surgeon	2
Urologist	6
Emergency Room Specialist	2
Osteopathic Physician	3
DENTISTRY	
Oral Surgeons	2
Orthodontists	5
Pedodontists	2
General Dentistry	42
Dental Hygienists	8½*
OPTOMETRISTS	11
PHARMACY	
Pharmacists	43½*
Pharmacy Aides	4
PHYSICIAN SUPPORT PERSONNEL	
Nurse Anesthetist	5
EKG Technician	2
NURSING AND RELATED SERVICES	
Registered Nurses	373½*
Licensed Practical Nurses	87½*
Nurse Aides/Orderlies	377
Ward Clerks	29

TABLE 14 (continued)

<u>Manpower Category</u>	<u>Number</u>
LAB/X RAY PERSONNEL	
Medical Technology	
Medical Technologists	25
Medical Technicians	10
Certified Lab Technicians	5
Radiologic Technology	
Technologists	2
Technicians	22
KITCHEN PERSONNEL	
Dietitians	9
Food Service Personnel	N.A.**
OFFICE PERSONNEL	
Medical Record Librarians	6
Record Clerks	12
Other	162
ADMINISTRATION	
Hospital	4
Nursing Home	5
PSYCHO-SOCIAL HEALTH SERVICES	
Psychologists (MA and PhD)	4½*
Social Service Workers	5
Vocational Rehabilitation Counseling	4
EMERGENCY HEALTH SERVICES	
Ambulances	N.A.**
Attendants	27
ENVIRONMENTAL HEALTH SERVICES	N.A.**
PUBLIC HEALTH	
Nurses	N.A.**
THERAPISTS	
Speech Pathology Therapist	1
Audiologist	1
Physical Therapist	6
Occupational Therapist	1½*
Inhalation Therapist	1
CHIROPRACTORS	13
VETERINARIANS	16
HEALTH PLANNING	
Health Care Planners	1

¹Information obtain from a survey conducted by the Mountain States Regional Medical Program, Boise , Idaho, summer, 1972.

*½ - Indicates that health personnel work only part-time in this capacity.

**N.A. - not available.

TABLE 15

LICENSED HOSPITALS IN AREA 5, APRIL, 1972

<u>County</u>	<u>Classification</u>	<u>No. of Beds</u>
BIG HORN COUNTY		
Big Horn County Memorial Hospital Hardin, Montana	SG	18
Indian Health Service Hospital* Crow Agency, Montana	-	N.A.**
CARBON COUNTY		
Carbon County Memorial Hospital Red Lodge, Montana	SG	28
GOLDEN VALLEY COUNTY		
none	-	-
MUSSELSHELL COUNTY		
Roundup Memorial Hospital Roundup, Montana	SG	17
STILLWATER COUNTY		
Stillwater Community Hospital Columbus, Montana	SG	27
SWEET GRASS COUNTY		
Sweet Grass Community Hospital Big Timber, Montana	SG	17
TREASURE COUNTY		
none	-	-
WHEATLAND COUNTY		
Wheatland Memorial Hospital Harlowton, Montana	SG	25
YELLOWSTONE COUNTY		
Billings Deaconess Hospital Billings, Montana	G MH	194 8
St. Vincent's Hospital Billings, Montana	G	202

SG - Small General

G - General

MH - Mental Health

*Federal, not licensed by the state.

Source: Montana State Department of Health and Environmental Sciences,
Division of Hospital and Medical Facilities, Helena, Montana,
1972.

**N.A. - Not Available.

HEALTH MANPOWER TRAINING RESOURCES IN SOUTH CENTRAL MONTANA

Most of the following information was obtained from personal and telephone interviews with school administrators and department heads and hospital program directors. The author cannot guarantee that this is an exhaustive list. However, most health personnel training programs of any size were surveyed in this report. Some of the statistics on enrollees and graduates are not precise but are estimates made by the school and hospital administrators and staff.

Eastern Montana College in Billings is a liberal arts college with an approximate enrollment of 3,400 students. It has a variety of health related curricula. However, since EMC is generally recognized as a teachers college, the health programs are quite small. This college offers four-year degrees in medical technology, pre-dentistry, pre-medicine, and pre-veterinary medicine. The medical technology program has attracted an average of twelve enrollees a year since 1970, graduating only between three to six a year. The pre-dentistry, pre-medicine, and pre-veterinary medicine programs average 30 enrollees and 15 graduates per year. A pre-pharmacy and nursing curriculum are also offered at Eastern Montana College, however, no degree is awarded as the students must transfer to Montana State University or the University of Montana before completing the full four years. Each year EMC loses approximately one-third of the above mentioned enrollees to the two state universities. In fact, some staff members encourage their students to transfer colleges in order to be assured of acceptance into medical schools.

Rocky Mountain College, also in Billings, has an enrollment of about 520 students. It also has several programs relating to health, including pre-medicine, pre-veterinary medicine, pre-dentistry, nursing, medical technology, and physical therapy. Pre-veterinary medicine and nursing have not had any enrollees or graduates in the last three years. The pre-medicine program has had between three and six enrollees with one to two graduates per year. This last year the pre-dentistry program did not have any enrollees or graduates but had averaged around two enrollees in previous years. The medical technology curriculum has increased in enrollees and graduates to five enrollees and two graduates in 1972. Physical therapy enrolled two students in 1972 but had no graduates. The college is presently working with mental health personnel to design a two-year AHS curriculum to train mental health assistants, community aide workers, and alcoholic counselors. The program is now in the process of applying for funds.

Billings Business College started a medical secretary program with Billings Deaconess Hospital over 20 years ago. The college trains students in typing, shorthand and office machines. When the students reach an acceptable typing and shorthand speed, they can be interviewed for the medical program. Each medical session lasts six months, and there are two sessions a year. Since the program can only handle 15 students a session, a total of 30 medical secretaries can be trained a year. Out of the 30, between 25 and 28 students actually finish the program. The placement percentage over the past twenty years has been close to 100 percent, as there is an estimated need for 37 medical secretaries a year just in the Billings area. Many of the students who do not complete the course are placed as medical transcribers, insurance and surgical supply personnel. Ward clerks are also trained in this same manner, however, the demand is not as great as it is for medical secretaries. A similar program was being considered for training dental assistants, but plans have never been completed.

St. Vincent's Hospital in Billings has a three-year school of nursing, however, it is now in the process of elimination. The Billings Deaconess Hospital shares the responsibility with Montana Deaconess in Great Falls of offering five quarters of classroom and practical experience to Montana State University nursing students. In 1969, the total number of students in the MSU nursing was 437 and the estimated enrollment for fall, 1972 is 667 students. This is an increase of about 53 percent. Over the last three years Billings Deaconess Hospital has taken between 72 and 94 of these MSU students a year and will take an estimated 133 this fall.

The Billings Vocational Technical Center has a twelve-month L.P.N. training program and a ten-week nurse aide course. The L.P.N. program is offered once a year and enrolls an average of 20 students and produces 18 graduates per year. Both Billings Deaconess and St. Vincent's Hospital are involved in the training of these practical nurses. There are two nurse aide courses a year enrolling 12 to 14 and graduating 10 to 12 students per session. The placement percentage of both L.P.N.'s and aides is quite high in the Billings area, and some students have been placed in Eastern Montana.

Both Billings hospitals have programs for training X Ray technicians. St. Vincent's program runs 24 months, enrolls 6 students a year and graduates 5. The Deaconess X Ray technician training lasts 30 months and is affiliated with Eastern Montana College. It attracts between seven and eight students and has been producing three to six X Ray technicians per year.

TABLE 16
HEALTH MANPOWER TRAINING RESOURCES IN SOUTH CENTRAL MONTANA,
1970, 1971, 1972.

INSTITUTION	1970*		1971*		1972*	
	Enrollees	Graduates	Enrollees	Graduates	Enrollees	Graduates
EASTERN MONTANA COLLEGE						
4 year programs						
Medical Technology	12	6	12	4	12	3
Pre-medicine	30	15	30	15	30	15
Pre-dentistry	30	15	30	15	30	15
Pre-veterinary medicine	30	15	30	15	30	15
1 year - no degree						
Nursing	15	-	15	-	15	-
ROCKY MOUNTAIN COLLEGE						
4 year programs						
Pre-medicine	3	1	6	2	6	3
Pre-veterinary medicine	0	0	0	0	0	0
Pre-dentistry	2	0	2	2	0	0
Nursing	0	0	0	0	0	0
Medical Technology	3	1	4	1	5	2
Physical Therapy	1	0	1	0	2	0
VOCATIONAL TECHNICAL CENTER						
12 month program						
L.P.N.	20	18	20	18	20	18
10 weeks program						
Nurses Aides	24	20	24	20	24	20
BILLINGS BUSINESS COLLEGE						
6 month program						
Medical Secretary	30	25-28	30	25-28	30	25-28
ST. VINCENT'S HOSPITAL**						
3 year program						
Nursing	4	35	0	27	0	21
2 year program						
X Ray Technician	6	5	6	5	6	5
BILLINGS DEACONESS HOSPITAL**						
2½ year program						
X Ray Technician	8	6	7	4	7	3
MONTANA STATE UNIVERSITY						
4 year program						
Nursing	437	117	460	104	530	91
5 quarters training						
Billings Deaconess	94	40	72	35	83	28
Montana Deaconess	88	48	92	44	104	41
On Campus (Bozeman)	255	29	296	25	343	22

*Graduating that year but enrolling the previous year.

**Source: Mountain States Regional Medical Program, Survey, Boise, Idaho, Summer, 1972.

SUGGESTION FOR LOCAL INTERDEVELOPMENT OF HEALTH TRAINING RESOURCES

"A reasonable conclusion is that, even in this area where the young move out, the native physicians tend to return."¹ If this is the case, Montana must devise an incentive for young, rural Montanans to enter medical professions. Since Montana has no medical school, this task becomes even more difficult. Montana cannot continue to depend on outside resources for its supply of physicians. State officials, the Montana University System and Board of Regents, the Montana Medical Association and Nursing Associations, health planning agencies, and all colleges and universities must recognize the health needs of their state. Strong curricula in basic science, active recruitment programs, counseling services and the establishment of adequate loan and scholarship funds are only some important steps that can be taken to improve Montana's health situation.

In 1963, Montana showed some interest and concern over the future of health care in the state by forming the Governor's Medical Education Committee.² What happened to this concern and why do serious problems still exist in health care in Montana? According to Dr. William R. Roy, M.D., the answer is "...lack of responsibility, for no one -- no group, no agency, no individual in our society today -- is responsible for assuring that health care is delivered to our people. No one is responsible for securing doctors for our rural and inner-city population."³ In order for the health care in Montana to improve, Montanans must take the responsibility. If the necessary steps are not going to be taken by state organizations or administration, local agencies and institutions must get the ball rolling. Since Billings, Montana is the largest and one of the fastest growing cities in Montana, it would be an ideal location for developing a cooperative program for educating needed health manpower for the area. Furthermore, Billings has the necessary resources available for development of such a system.

Eastern Montana College offers a variety of health related curricula but remains weak in these areas because of stipulations put on them by the college and the Montana Board of Regents. This college draws many

¹Matthews, Hugh A., M.D., North Carolina Medical Journal, Vol. 32, Winston-Salem, N.C., 1971, p. 245.

²Governor's Medical Education Committee, Report of the First Meeting (of the Committee), Helena, Montana, July 8, 1963, p. 1.

³Roy, William R., M.D., Health Maintenance Organization Act of 1972, The Science & Health Communications Group, Washington, D.C., 1972, p. 8.

local students and Eastern Montanans and would, therefore, be an excellent tool for recruiting Montanans from shortage areas into health professions. If EMC is unable to expand its science curricula and properly promote these programs due to the above mentioned stipulations, Rocky Mountain College also offers four-year degrees in health curricula. Since Rocky Mountain College is a private institution, it is not subject to restrictions by the Montana Board of Regents. Eventhough it draws some out-of-state students, proper counseling could persuade many students to settle in state after completing their training. Another area in which these colleges can be of paramount importance is in statistical research. The South Central region of Montana badly needs information on health manpower turn-over and needs, and reasons for usage of health facilities and physicians.

The health curricula at both of these colleges are weak, and it would appear that a cooperative division of programs would not only strengthen the programs within each college but greatly contribute to the recruitment of Montanans into health professions. At any rate, educators from both institutions should meet to discuss the health care problems that are facing their area and state and define their role in relation to these problems.

In addition to the two colleges, Billings has two hospitals capable of handling training experience for allied health students. The Veterans Administration Hospital in Miles City (150 miles east of Billings) has expressed an interest in aiding in the training of Billings health students.

The local health planning agency would be the most logical organizing body of this entire project. The council should serve as a motivating force, not only to initiate the study of a health education system, but to insure continued interest and involvement in the project. It is the belief of some council members that a qualified health planner should be hired. He should then be given enough corroboration and authority by the board so as to function in a professional capacity. Many members feel that the council should reorganize so as to include a more active representation of all health organizations, health professions, health training institutions, and interested consumer groups in the area. A greater representation of rural communities should become actively involved in health planning in order to guarantee that health education is geared toward supplying the rural areas with needed health manpower. After an effective and representative health planning agency has been established, further steps should be taken by them to initiate a more thorough study of the current health education situation in the area.

Meetings of officials from Eastern Montana College, Rocky Mountain College, Billings Business College, Billings Vocational Technical Center, St. Vincent's Hospital, Billings Deaconess Hospital, Veterans Administration Hospital (Miles City), the local Medical Association and Nursing Associations should be arranged through the planning agency. National, regional and state reports and recommendations on health education should be obtained

and circulated among these local health provider and educator groups for their review and discussion.

This period of orientation should be followed by serious discussion of possible cooperative steps that can be taken by current health educators to decrease unneeded duplication and increase collaboration of programs. Plans should be made to begin statistical research of the area through the local colleges. Investigation of possible local, state and federal aid for prospective medical students and an active program of recruitment should be undertaken to encourage interested and qualified students to consider entrance into medical careers. Necessary counseling services should be provided at both the high school and college levels.

Since the South Central Regional Health Planning Council, Incorporated is to play a key role in the planning of an area health education system, hiring of a health planner and reorganization of the board must take priority over all other planning activities. Accomplishment of the other suggestions previously mentioned should also precede any undertaking of new programs involving outside resources.

HEALTH SERVICE NEEDS AND ATTITUDES IN SOUTH CENTRAL MONTANA

"The most serious shortages of professional personnel in any major occupation group in the United States are in the health services. Although the best medical care in this country is as good as any in the world, many Americans receive inferior care, and some health care needs go entirely untreated."¹ This quote proves that problems in health service delivery are prevalent in places other than just South Central Montana. Indeed, health manpower shortages exist in large metropolitan centers as well as in small rural communities, but their problems differ in nature.

METHODOLOGY

Following are some of the health needs and attitudes obtained from interviews in rural South Central Montana. As many as 15 people were contacted in some communities and as few as two were interviewed in others. Extensive interviewing was done in three counties, Carbon, Stillwater and Musselshell (refer to CHART 1, page 5). The acceptance of an outsider, myself, in the communities was surprisingly good. Nearly 100 percent of all persons contacted appeared interested in the project and were very cooperative. In order to obtain candid, open answers, I chose to conduct my interviews without a questionnaire. By simply guiding the conversation, the subject was able to introduce his own points of interest without being influenced by the interviewer.

GROUP PRACTICE

"As to another physician locating here, it just isn't in the cards for one man to do work as two, and I would welcome help."² This statement was made by an Eastern Montana physician who practiced alone for a considerable length of time. Not all rural doctors think this way, however. A survey taken in North Carolina indicates that physicians themselves may be the one most immediately effective resource in securing other physicians and that squabbling doctors can do more than anything else in turning off prospective peers.³ Both cases exist in South Central

¹The Carnegie Commission on Higher Education, Higher Education and the Nation's Health, McGraw-Hill Book Company, Hightstown, New Jersey, October 1970, p. 13.

²American Medical Association, Bureau of Medical Economic Research, Distribution of Physicians by Medical Service Areas, Chicago, Ill., 1954, p. 119.

³Matthews, Hugh A., M.D., North Carolina Medical Journal, Vol. 32, Winston-Salem, N.C., 1971, p. 245.

Montana. A doctor in one of the communities has brought two other physicians into his county, while statements were made to the effect that another rural doctor would probably do anything he could to keep another physician out of his community. I talked with one of the physicians who had succeeded in securing additional doctors for his area. He gave two reasons why rural doctors hesitate to open group practices; money and pride. This doctor said he had enough patients for one and one-half physicians before he brought in his first partner and worried about what a second doctor would do to him financially. As it was, the second doctor increased the patient-load enough for two and one-half doctors. Since he had become personally acquainted with his patients, his second fear was that of losing some of them to another physician. However, since both doctors are in the same practice, they see many of the same patients. The acquisition of a second doctor was so prosperous that there is now a third physician in the practice and enough patients for three and one-half doctors.

RURAL PHYSICIANS

In some communities in South Central Montana community doctors do not feel it would be advantageous to bring another physician into the area. Although there are too many patients for the present doctors to handle, they still doubt if there would be enough demand to support another physician, and therefore, discourage prospective peers. Perhaps one-half of a doctor, a physician's assistant, would improve the situation. Dr. B.C. Farrand of Jordan, Montana had this to say:

I have been trying out a new arrangement with some of the Senior students from Denver, University of Colorado, taking them for three months at a time when they have their time off during their senior year. I have been quite pleased with the ones that have come, and they do a lot of the routine work. Although I don't go away and leave them unless I am on call, still it does help -- both of us. It gives them a chance to see what general practice in a community is like, and they also keep me on my toes, trying to keep up with them and answering some of the questions they ask.

This would appear to be a good solution to the problem of health manpower shortage. However, physician's assistants and nurse practitioners as well as programs such as the National Health Service Corps and WAMI²,

¹American Medical Association, Bureau of Medical Economic Research, Distribution of Physicians by Medical Service Areas, Chicago, Ill., 1954, pp. 119-20.

²WAMI - Pilot project in medical education involving the University of Washington medical school and four states; Washington, Alaska, Montana and Idaho to: 1. provide the first year of medical education at one university in a cooperating state and away from the medical school in Seattle, 2. improve health care delivery in cooperating states by offering preceptorships involving medical students in health care delivery systems in sparsely populated Western states, 3. attract medical students to practice in these areas after graduation.

designed to temporarily supply shortage areas with health manpower and stimulate the health professional to establish roots in a community, are viewed with skepticism in some South Central Montana communities. Both allied health persons and physicians in the rural communities expressed some doubt as to the future success and use of these programs and personnel. The main reasons given were lack of faith by community citizens in anyone less than a home town M.D., and the slim chance of persuading young health professionals to remain in their community.

RURAL NURSING

One subject that was mentioned by several hospital administrators and registered nurses was nursing education. They feel registered nurses are not properly trained for work in small community hospitals; they are not skilled enough in all areas and are lacking in experience in personal contact with patients. A suggestion was made that student nurses take part of their training in a small community hospital, allowing them to experience small hospital work and subjecting permanent staff to new techniques through contact with students.

CONTINUING EDUCATION

"...with proper utilization of the doctor's time, given the proper facilities and help, one M.D. can take care of most of the things that come up in a rather large group of people. But, it keeps him too tied down and he has to be careful or he will become rusty on advancements in medicine because he is too confined by the nature of his work."¹ This quote explains perfectly the situation in most South Central Montana communities, and why the Regional Medical Programs are so well accepted. The RMPs have been putting on programs in the Billings hospitals and occasionally in a small community hospital, and most health administrators and physicians are able to utilize them. However, the expense of sending staff to Billings, other parts of the state and even out of state is a burden on most of the small community hospitals. The staff and administration of these hospitals feel these programs are more valuable to them if they are able to learn in their own environment where their problems can be seen by experts. Although staff from the Billings hospitals are also interested in helping the small surrounding hospitals, they also find it difficult to leave their regular duties to travel.

CONSUMER EDUCATION

Interviews conducted in rural communities in South Central Montana indicate a lack of awareness of health services, facilities and needs.

¹American Medical Association, Bureau of Medical Economic Research, Distribution of Physicians by Medical Service Areas, Chicago, Ill., 1954, p. 120.

How do you motivate citizens of small communities to work and fight for a right to which all persons are entitled when they do not view health care as a right? In fact, many do not view it as an absolute necessity. Health care problems not only involve shortages of allied health personnel and physicians and a lack of suitable facilities, but also include community attitudes that may block improvements in health care delivery.

I consider consumer education a health service need, for an educated citizenry can add to the health manpower of its area by better being able to care for itself, using health services, and, therefore, freeing more of the physician's time. As it is now in many of the small communities in South Central Montana, doctors see as many as 35 patients a day, many of whom come in just for counseling and first aide treatment. One community in which this occurs, has a mental health worker. This implies that available services are not being utilized. The hospital administrator in the same town admitted that he would like to advertize the hospital services to induce greater utilization. There is also a contraposition to this situation. In more than one interview in this same community, people indicated that they have a public health nurse when, in fact, they do not. Citizens in this town rated the health awareness of their community quite high.

COMMUNITY INVOLVEMENT

Members of one community have recently attempted to gain support for a public health nurse. Supporters of this endeavor feel a public health nurse is needed to attend to school health services, now handled by the R.N. Club, and aid with problems of the aging. Although opponents also feel these services are needed, they do not believe a public health nurse is the answer. It is the belief of some citizens that the nurse is being opposed by the community physicians because they fear competition. There does not appear to be enough citizen involvement to convince the doctors otherwise. In the words of a native, "People around here never have gotten involved; they always leave things up to the other guy." Not all South Central communities can be compared to this one, however. Interviews in some communities revealed that citizens feel they are far ahead of other small towns and attribute this to either an influx of younger people who have caused changes to occur in health care, interested businessmen who support new health programs, or doctors who obtain and support new health services for their community. Each community appears to have its own personality which influences the health care.

DOCTOR-COMMUNITY CONFLICT

Doctor-community conflict was also prevalent in some counties. Some reasons given for apparent conflict were unreasonably high fees for primary care, personality clashes, and lack of personalized physician's care. The latter seems to be a necessity in small communities

for all business interactions in these towns appear to have a personal touch. Consequently, rural citizens are left with the choice of patronizing the local physician or traveling up to sixty miles away to see another one.

HEALTH MANPOWER NEEDS

Following is a list of health professionals most often mentioned by hospital administrators, community leaders, and citizens as being needed in their community. The order in which they appear indicates the number of times they were mentioned as a need; most often mentioned to least often mentioned.

1. Registered Nurses
2. Licensed Practical Nurses
3. Public Health Nurses
4. Physicians
5. Qualified Ambulance Attendants
6. Lab Personnel
7. X Ray Personnel

RECOMMENDATIONS

RURAL DOCTORS

"Doctors must recognize that they are not gods."¹ Situations exist in some of the rural communities that only a doctor can alter, given that he is willing to induce change. However, rural doctors fear change as much as anyone else. Rural physicians would be more likely to induce change and accept the responsibility of sponsoring health interns or of hiring physician's assistants if the local Medical Association would support these programs. In order to help the rural communities obtain needed health personnel, the Medical Association should publicly give their support to the National Health Service Corps, WAMI, Medex and other related programs. Incitement by peers could, no doubt, be a very effective method of motivating rural M.D.s to try new programs.

A long-range solution to the problem of physician shortage is the identifying and encouraging of prospective medical students by rural physicians. These students may return home after completing their training as one South Central Montanan did.

"All but one of the responding physicians had been attracted to the area by the mountains and valleys, lakes and streams.... Perhaps this and other depressed areas with geographic assets might well find ways and means to bring prospective physicians to the region during all seasons, if possible."² One South Central Montana Community did find a way to procure a physician. They advertised in a national magazine. Although some surveys indicate that size of the community is a doctor's first consideration in selecting a location in which to practice,³ the above quote from a North Carolina survey reveals some reasons why physicians settle in rural communities. South Central Montana does have geographic assets, and surely, there are doctors somewhere who are willing to take advantage of them and accept the challenge of a rural practice. Some South Central communities might profit by following the example set by their neighboring county and advertising their needs and assets. Prerequisites of this, however, are community involvement and support of local physicians.

¹Neal, O., Jr., "The 'How' of Community Participation", Bulletin of the New York Academy of Medicine, Vol. 46, New York, N.Y., Dec. 1970.

²Matthews, Hugh A., M.D., North Carolina Medical Journal, Vol. 32, Winston-Salem, N.C., 1971.

³Hassanein, K.M., Hassanein, R.S., and Marshall, C.L., American Journal of Public Health, Vol. 61, August 1971.

CONSUMER EDUCATION AND COMMUNITY INVOLVEMENT

An educated citizenry can override almost any other force in a small community. It can produce enough support for a public health nurse or an additional doctor, and it will utilize already existing services. The South Central Regional Health Planning Council, Inc. has considered setting up health planning councils in each of the rural counties. This should be done immediately. These local councils would be an ideal organization for educating their community from within about health care needs and facilities. One community in which a council has been established is considering giving their Mental Health worker a column in the local newspaper as well as setting up assemblies for him in the schools. This would also be a good way for hospital administrators to advertise their services. Articles on current health trends should be printed in these local newspapers to inform citizens of what they have and are not using and what services they do not have and need. Citizens must also realize that their doctors are only human and need their cooperation.

"The community must control nonmedical decisions that are made. Meaningful communication must be established in some way between the health professionals and the community served."¹ These local health planning councils could provide this meaningful communication and non-medical decisions, thereby aiding in the elimination of doctor-community conflict.

Representatives of these local councils should actively participate in the activities of the larger, regional health planning council in order to inform members of the urban center (Billings) of how they can be of service to the rural communities, i.e. producing nurses qualified to work in small rural hospitals.

CONTINUING EDUCATION

Although the Regional Medical Programs (RMPs) have brought a great deal of in-service education to South Central Montana, health personnel desire more. Two hospital administrators specified that they would like to have an RMP program held in their hospital; one designed exclusively for their hospital and staff and one that would help them provide the best medical care using the available resources and equipment. Some health professionals in the Billings area have given some thought to the idea of a team of health experts designed specifically for this task. Such a team could be very valuable to the rural hospitals. The District Six Hospital Learning Center² should put this on their agenda for discussion and consider the Regional Medical Programs when contemplating possible sponsoring agencies for such a team.

¹Neal, O., Jr., "The 'How' of Community Participation," Bulletin of the New York Academy of Medicine, Vol. 46, New York, N.Y., Dec. 1970.

²District Six Hospital Learning Center is an organization established through the cooperative efforts of the Mountain States Regional Medical Program, Montana State Hospital Association and Intermountain Regional Medical Program for the purpose of providing continuing education to the area.

RESEARCH

This project was exhaustive enough to reveal some important areas which need much more exploration. For example, why do some of the most economically prosperous counties have no health facilities or personnel (refer to TABLE 4)? Why is the infant death and stillbirth rate so high in rural South Central Montana? What are the main reasons for physician and hospital usage, and to what extent are existing facilities being utilized?

These studies will add some concreteness to current theories. However, facts and figures will not solve all of the problems. The character of a rural community cannot be computed and placed on a chart with other statistics, eventhough it is equally pertinent. Just because someone identifies the need for a public health nurse in Community "X" does not mean she will be accepted or her services will be utilized by the citizens and local physicians. Therefore, a health service need is not a tangible entity; it must be made to fit the environment. Each county in South Central Montana is similar to the others in many ways, but differs in just as many aspects. The rural communities and the health planning councils must realize this and take steps toward gaining insite into the personality of each county in order to make health planning more effective.

APPENDIX A
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APPENDIX B

Acknowledgements

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THE RESOURCES DEVELOPMENT INTERNSHIP PROGRAM

The preceding report was completed by a WICHE intern during the summer of 1972. This intern's project was part of the Resources Development Internship Program administered by the Western Interstate Commission for Higher Education (WICHE).

The purpose of the internship program is to bring organizations involved in community and economic development, environmental problems and the humanities together with institutions of higher education and their students in the West for the benefit of all.

For these organizations, the intern program provides the problem-solving talents of student manpower while making the resources of universities and colleges more available. For institutions of higher education, the program provides relevant field education for their students while building their capacity for problem-solving.

WICHE is an organization in the West uniquely suited for sponsoring such a program. It is an interstate agency formed by the thirteen western states for the specific purpose of relating the resources of higher education to the needs of western citizens. WICHE has been concerned with a broad range of community needs in the West for some time, insofar as they bear directly on the well-being of western peoples and the future of higher education in the West. WICHE feels that the internship program is one method for meeting its obligations within the thirteen western states. In its efforts to achieve these objectives, WICHE appreciates having received the generous support and assistance of the Economic Development Administration, the Jessie Smith Noyes Foundation, the National Endowment for the Humanities, the National Science Foundation, and of innumerable local leaders and community organizations, including the agency that sponsored this intern project.

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